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EXAMINER

NGUYEN, HUNG T

ART UNIT	PAPER NUMBER
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2636

DATE MAILED: 08/16/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/669,669

Applicant(s)

RUNYON ET AL.

Examiner

Hung T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-54 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 13-54 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 23 September 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/29/05
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.84(o) which requires legends on drawings:
--In fig. 20, the number in the box 260 should be provided with descriptive labels (e.g., Receiver, Receiver Unit, etc). Correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

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3. Claims 13, 15, 17-20, 30-31, 35-36 & 50-53 are rejected under 35 U.S.C. 102(e) as being anticipated by McSheffrey et al. (U.S. 6,488,099).

Regarding claim 13, McSheffrey discloses a method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

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Regarding claim 15, McSheffrey discloses plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58].

Regarding claim 17, McSheffrey discloses plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58].

Regarding claims 18-20, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

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Regarding claims 30-31, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as **movement**, **removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

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Regarding claims 35-36, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Regarding claims 50-53, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];

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- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 14, 16, 21-29, 33 & 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over McSheffrey et al. (U.S. 6,488,099).

Regarding claim 14, The reference of McSheffrey does not specifically mention the transmitters is configured to communicate with the receiver via another of the transmitters because that is an obvious design choice of the skilled artisan.

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McSheffrey discloses the method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the method of McSheffrey for transmitting the warning signal to the remote receiver if ANY fire extinguisher is not in the normal condition.

Regarding claim 16, The reference of McSheffrey does not specifically mention the detector may detect the fire extinguisher trigger pin as claimed by the applicant.

However, McSheffrey does disclose plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal, low pressure in the tank (34)** of the fire extinguisher and material in a volume of the tank, **internal and external conditions** which the

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fire extinguishers (12) are docked in a station (16) [figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62].

Therefore, it would have been obvious to one having ordinary skill in the art to employ the method of McSheffrey for performing the same function as desired.

Regarding claim 21, The reference of McSheffrey does not specifically mention the transmitters are defined by transceivers as claimed by the applicant.

However, McSheffrey discloses the method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having **electronic circuits** contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting the warning signal to the remote receiver if ANY fire extinguisher is not in the normal condition.

Regarding claims 22-24, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as **movement**, **removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as **tamper**, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

The reference of McSheffrey does not specifically mention the detector may detect the fire extinguisher trigger pin as claimed by the applicant.

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However, McSheffrey does disclose plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal, low pressure in the tank (34)** of the fire extinguisher and material in a volume of the tank, **internal and external conditions** which the fire extinguishers (12) are docked in a station (16) [figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62].

Therefore, it would have been obvious to one having ordinary skill in the art to utilize the system of McSheffrey for monitoring the fire extinguisher is in good condition at all time.

Regarding claims 25-27, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal, low pressure in the tank (34)** of the fire extinguisher and **material in a volume of the tank, internal and external conditions** which the fire extinguishers (12) are docked in a station (16) [figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];

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- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as **tamper**, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];

Regarding claim 28, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as **tamper**, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Regarding claims 29 & 37, The reference of McSheffrey does not specifically mention the tapering signal are defined by transceivers as claimed by the applicant.

However, McSheffrey discloses the system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

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- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having **electronic circuits** contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting the warning signal to the remote receiver if ANY fire extinguisher is not in the normal condition.

Regarding claim 33, The reference of McSheffrey does not specifically mention the detector may detect the fire extinguisher trigger pin as claimed by the applicant.

However, McSheffrey does disclose plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal, low pressure in the tank (34)** of the fire extinguisher and material in a volume of the tank, **internal and external conditions** which the fire extinguishers (12) are docked in a station (16) [figs.4-7, col.4, lines 2-24, col.6, lines 45-58 and col.10, lines 24-62];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62].

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Therefore, it would have been obvious to one having ordinary skill in the art to employ the system of McSheffrey for performing the same function as desired.

6. Claims 32, 34, 38-49 & 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over McSheffrey et al. (U.S. 6,488,099) in view of Runyon et al. (U.S. 6,774,782).

Regarding claims 32 & 34, The reference of McSheffrey does not specifically mention the fire extinguisher includes interrogation signal to communicate with the tampering signal / detector as claimed by the applicant.

However, McSheffrey discloses the system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having **electronic circuits** contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Furthermore, Runyon teaches a system for reducing security risks in an enclosed area where there are documents and other items (32-44) has an RFID tag (32a-44a) attached thereto. The area is periodically interrogated by an RF interrogator to ascertain whether the items are in

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their locked secured position or are in an open area [figs.1-2, col.9, lines 25-35, col.10, lines 16-34 and col.11, lines 45-54].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Runyon in the system of McSheffrey for communicating each other as question & reply between the transponder / RFID tag and the remote central station and to provide overall security of the area is enhanced.

Regarding claims 38-39, McSheffrey discloses a method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

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The reference of McSheffrey does not specifically mention the transmitters are defined by transceivers and interrogation signal as claimed by the applicant.

However, McSheffrey discloses the method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having **electronic circuits** contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting the warning signal to the remote receiver if ANY fire extinguisher is not in the normal condition.

Furthermore, Runyon teaches a system for reducing security risks in an enclosed area where there are documents and other items (32-44) has an RFID tag (32a-44a) attached thereto. The area is periodically interrogated by an RF interrogator to ascertain whether the items are in their locked secured position or are in an open area [figs.1-2, col.9, lines 25-35, col.10, lines 16-34 and col.11, lines 45-54].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Runyon in the system of McSheffrey for communicating each other as question &

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reply between the transponder / RFID tag and the remote central station and to provide overall security of the area is enhanced.

Regarding claim 40, McSheffrey discloses a method of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];

Regarding claims 41-43, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not

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in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Regarding claims 44-46, McSheffrey discloses a system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal [figs.1-3, 11, col.4, lines 2-26, col.6, lines 45-58, col.8, line 54 to col.9, line 20 and abstract] comprising:

- a plurality of detectors for detecting condition of fire extinguishers (12) as movement, removal, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];
- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- a receiver device (28) coupled to a remote central station (26) / computer system (106) for receiving data information / warning signals (100, 102, 104) about the conditions of the fire extinguishers (12) as testing, maintenance, inspected, tamper, movement, removal, low pressure, physical damage, leakage, annual physical inspection, malfunction and so on from the fire extinguishers (12) [figs.1-3,11, col.4, line 26 to col.5, line 59, col.8, line 54 to col.9, line 20 and lines 57-62].

The reference of McSheffrey does not specifically mention transceivers are connected to the fire extinguisher and interrogation signal as claimed by the applicant.

However, McSheffrey discloses the system of monitoring a plurality of fire extinguishers (12) from a remote location (26) by wireless signal comprising:

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- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal [fig.1, col.8, line 54 to col.9, line 20 and lines 57-62];
- the detectors having **electronic circuits** contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4];

Therefore, it would have been obvious to one having ordinary skill in the art to have the method of McSheffrey for transmitting the warning signal to the remote receiver if ANY fire extinguisher is not in the normal condition.

Furthermore, Runyon teaches a system for reducing security risks in an enclosed area where there are documents and other items (32-44) has an RFID tag (32a-44a) attached thereto. The area is periodically interrogated by an RF interrogator to ascertain whether the items are in their locked secured position or are in an open area [figs.1-2, col.9, lines 25-35, col.10, lines 16-34 and col.11, lines 45-54].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Runyon in the system of McSheffrey for communicating each other as question & reply between the transponder / RFID tag and the remote central station and to provide overall security of the area is enhanced.

Regarding claims 47-49, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure

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and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

Regarding claim 54, McSheffrey discloses battery devices (98) may power to plurality of detectors for detecting condition of fire extinguishers (12) as **movement, removal**, low pressure and so on which the fire extinguishers (12) are docked in a station (16) [fig.8col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58];

- the detectors coupled to transmitters for transmitting warning signals (100,102,104) to a receiver (28) at remote location (26) by wireless signal from the battery devices (98) [figs.1, 8, col.8, line 54 to col.9, line 20 and lines 57-62];

- the detectors having electronic circuits contain **radio frequency identification** signals / tags / transponders are attached to the fire extinguishers (12) to identify which fire extinguisher is not in the normal condition as tamper, removed, **tether (32) is broken** and so on [col.3, lines 1-35, col.5, lines 2-22, col.6, lines 45-58 and col.12, line 60 to col.13, line 4].

The reference of McSheffrey does not specifically mention the fire extinguisher includes interrogation signal as claimed by the applicant.

Furthermore, Runyon teaches a system for reducing security risks in an enclosed area where there are documents and other items (32-44) has an RFID tag (32a-44a) attached thereto. The area is periodically interrogated by an RF interrogator to ascertain whether the items are in their locked secured position or are in an open area [figs.1-2, col.9, lines 25-35, col.10, lines 16-34 and col.11, lines 45-54].

Therefore, it would have been obvious to one having ordinary skill in the art to use the teaching of Runyon in the system of McSheffrey for communicating each other as question & reply between the transponder / RFID tag and the remote central station and to provide overall security of the area is enhanced.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Weise (U.S. 3,768,567) Automatic remote control discharge system for portable fire extinguishers.
- Merill (U.S. 5,952,919) Fire extinguisher alarm system.
- Thomas et al. (U.S. (6,288,637) Fire protection system.


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8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung T. Nguyen whose telephone number is (571) 272-2982. The examiner can normally be reached on Monday to Friday from 8:00am to 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hofsass, Jeffery can be reached on (571) 272-2981. The fax phone number for this Group is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

**HUNG NGUYEN
PRIMARY EXAMINER**


Examiner: Hung T. Nguyen

Date: August 11, 2005